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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,466	02/06/2004	Moon-jeong Choi	Q79174	6714
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EXAMINER				
EL-ZOOBI, MARIA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/772,466

Applicant(s)

CHOI, MOON-JEONG

Examiner

MARIA EL-ZOOBI

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson (US Patent 6,526,581) in view of Lee (US Publication 2003/0078990) in view of Skldman (US Publication 2003/0026393) and further in view of Kim (US Patent 5,894,508).

Regarding claim 1, Edson discloses, a fax service system in a home network (col. 8, lines 33-37, col. 15, lines 52-58).

a storage means for storing a fax data (Fig. 2 ,el. 107 and 111; col. 9, lines. 8-14)

a fax machine (col. 8, lines. 32-37) connected to the home network through a gateway (col. 7, lines 44 - 47) and a telephone line (Fig. 1, el. 21, Fig. 2, el. 19,15; col. 4, lines 25-30). It is noted that Edson's fax machine (Fig. 33, el. 33) is connected to the home network (Fig. 1, el. 21 and 23).

a fax data processing unit receiving the fax data through the Internet Protocol destined for the fax machine which is connected to the home network through the

gateway and the telephone line, and storing the fax data in the storage means (Fig. 2, el. 105, 107 and 111; col. 9, lines 8-14).

Edson does not disclose that the gateway acts as a fax server.

Lee discloses a home gateway that is able to function as a fax server to send /receive fax data (paragraph. 007).

Therefore, it would be have been obvious to a one with ordinary skill in the art at the time of the invention to modify Edson fax service system in view of Lee so Edson's gateway act as a fax server that further can control household appliances without requiring additional wiring (paragraph 0006 and 0007)

Edson in view of Lee disclose a home gateway for collecting a device information and a control information from at least one information device connected to the home network and providing the device information and the control information upon a request for purposes of unified messages (0003 and 0021)

Edson in view of Lee do not disclose a middleware.

Skladman discloses, a middleware server (Fig. 3a, el. 34) for collecting a device information and control information to the home network (paragraph 0030, 0031) and providing the device information and the control information upon a request (paragraph 0056).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to use the middleware server as taught by Skladman onto the

fax service system which have been taught by Edson in view of Lee to provide communication between the appliances through the middleware server.

Edson in view of Lee and further in view of Skladman disclose a the fax data processing unit transmits a control command to the gateway through the middleware server.

Edson in view of Lee and further in view of Skladman don't disclose transmitting the control command to change the fax machine into an ON state when the fax machine is detected in an OFF state according to an information of the fax machine to perform the fax function accordingly.

Kim discloses, a control command "the ringing signal which indicates that there is a data transmission" and turn a fax machine ON to perform the fax operation (Col. 1, lines 58-62, Col. 2, lines 55-65 and Col. 3, lines 8-14 also see Fig. 2).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to modify Edson in view of Lee and Skladman using the function of turn the fax machine ON/OFF based on its state when a data is received , as taught by Kim in order to save power.

Regarding claim 2, Edson in view of Lee, Skladman and Kim further disclose, the fax data processing unit requests the middleware server to display a message informing a receipt of the fax data on a display connected to the home network, when the fax data is received from an external network (Skladman: paragraph

0043-0044 and paragraph 0052-0054).

Regarding claim 3, Edson in view of Lee, Skladman and Kim further disclose, fax data processing unit transmits a control command to the power switch through the middleware server to change the fax machine into the off state when the fax data is completely transmitted to the fax machine(as discussed in claim 1).

Regarding claim 4, Edson (Fig.1, el. 312 and el. 323) in view of Lee and further in view of Skladman and further in view of Kim disclose, the power switch is a power line communication module in the fax machine.

Regarding claim 5, Edson in view of Lee, Skladman and Kim further disclose, the power switch is an adaptor which connects a power plug of the fax machine with a jack for controlling a supply of power to the fax machine to change a fax machine state comprising the on state and the off state, according to the control command (reads on Kim in which the function switch select the ON/OFF state of the fax device to supply or not supply power to the fax machine (col. 3, lines. 11-14).

Regarding claim 6, this claim differs from claim 1 only in that claim 6 is method whereas claim 1 is a system. The additional limitation providing a respective identifier (ID) to each of information devices connected to the home network is further teach by Skladman (paragraph. 0031- 0032; for ex. IP address or each device has it's own unique MAC address).

Regarding claim 7, Edson in view of Lee, Skladman and Kim disclose, the step of displaying a message informing a receipt of the fax data on a display which is connected to the home network, when the fax data is received from an external network (see the discussion of claim 2).

Regarding claim 8, Edson in view of Lee and further in view of Skladman and further in view of Kim disclose, the step of transmitting a control commands to the power switch through the middleware server to change the fax machine into the off state (see the discussion of claim 1).

Regarding claim 9, Edson in view of Lee, Skladman and Kim disclose, power switch is a power line communication module in the fax machine (see the discussion of claim 4).

Regarding claim 10, Edson in view of Le, Skladman and Kim disclose, the power switch is an adaptor which connects a power plug of the fax machine with a jack for controlling a supply of power to the fax machine to change a fax machine state comprising the on state and the off state, according to the control command (see discussion of claim 5).

Regarding claim 11, Claim 11 is rejected in light of the combine references as previously noted. Figure 2 of Edson illustrates a "first interface" connecting the gateway in a home network to external network (Fig. 2, el. 117-119 and 115) and (col.

8, lines 33-37, Col 15, lines 52-58), a "second interface" (Fig. 2, el. 121), "a storage means" (Fig. 2, el. 107) and "control unit" reads on Edson (Fig. 2, el. 105). Edson, however, is silent regarding the 'first interface' comprising a 'middleware server' as claimed.

Lee discloses a home gateway that is able to function as a fax server to send /receive fax data (paragraph. 007).

Skladman discloses, a middleware server (Fig. 3a, el. 34) for collecting a device information and control information to the home network (paragraph 0030 and 0031) and providing the device information and the control information upon a request (paragraph 0056).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to use the middleware server as taught by Skladman onto the fax service system which have been taught by Edson in view of Lee to provide communication between the appliances through the middleware server.

Edson in view of Lee and further in view of Skladman do not disclose that the 'control unit' transmitting the control command to change the fax machine into an ON state when the fax machine is detected in an OFF state according to an information of the fax machine to perform the fax function accordingly.

Kim discloses, a control command "the ringing signal which indicates that there is a data transmission" and turn a fax machine ON to perform the fax operation (Col. 1, lines 58-62, Col. 2, lines 55-65 and Col. 3, lines 8-14 also see Fig. 2).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to modify the Edson "control unit" using the function of turn the fax machine ON/OFF based on its state , as taught by Kim in order to save power.

Regarding claim 12, Edson in view of Lee, Skladman and Kim disclose, the control unit requests the middleware server to display a message informing a receipt of the fax data on a display which is connected to the home network, when the fax data is received from the external network (see discussion in claim 2).

Regarding claim 13, Edson in view of Lee, Skladman and Kim disclose the control unit transmits a control command to the power switch through the middleware server to switch the fax machine into the off state (see discussion in claim 3).

Regarding claim 14, Edson in view of Lee, Skladman and Kim disclose, the power switch is a power line communication module in the fax machine (see discussion in claim 4).

Regarding claim 15, Edson in view of Lee, Skladman and Kim disclose, the power switch is an adaptor which connects a power plug of the fax machine with a jack for supplying power to the fax machine, and switches the power supply according to the control command (see discussion in claim10).

Regarding claim 16, Edson in view of Lee, Skladman and Kim disclose, the fax

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data processing unit receives the fax data from an external network (Edson: Fig. 1, el. 17-19 and 15).

Regarding claim 17, Edson in view of Lee, Skladman and Kim disclose, the fax data is received from an external network (Edson: Fig.1, el. 17-19).

Regarding claim 18, Edson in view of Lee, Skladman and Kim disclose, the power switch is connected to a power plug of the fax machine (Kim: Fig. 2) and a power jack communicably connected to the home network (Kimura in Fig. 2 shows that the fax machine is connected to a telephone line "Fig. 2, el. line; which will be "like in any fax apparatus" connected through a power jack to the home network).

3. Claim 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable Edson (US Patent 6,526,581) in view of Lee (US Publication 2003/0078990) and in view of Skladman (US Publication 2003/0026393) and in view of Kim (US Patent 5,894,508) and further in view of Frise (6,628,771)

Regarding claim 19, Edson in view of Lee, Skladman and Kim discloses, fax service system (Fig. 1, el. 1) comprising :

power jack, power switch, power plug and adapter(as previously discussed).

Edson in view of Lee, Skladman and Kim doesn't expressly teaches how those elements are connected to each other, the fax machine or to the home network.

Frise disclose an adapter (Fig. 4) having a first end directly connected to the

power jack (Fig. 4, el. 114) and a second end directly connected to the power plug (Fig. 4, el. AC IN and see Fig. 3, el. 211)

Wherein the power switch is disposed inside the adapter (Fig. 4, el. 211) and is configured to electrically connect the first end and the second end (Fig. 3)

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Edson in view of Lee and in view of Skladman and in view of Kim fax system to have the elements connected in the way that Choi suggested in order to have the electrical power operate the fax machine.

Regarding claim 20, Edson in view of Lee, Skladman and Kim discloses power switch is connected to a power plug of the fax machine and a power jack communicably connected to the home network (see explanation in claim 8).

Edson in view of Lee, Skladman and Kim doesn't expressly teaches the power switch is disposed inside an adapter configured to engage the power jack on a first end of the adapter and the power plug on a second end of the adapter.

Frise discloses, the power switch is disposed inside an adapter configured to engage the power jack on a first end of the adapter and the power plug on a second end of the adapter (see claim 19).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Edson in view of Lee and in view of Skladman and in view of Kimura fax system to have the elements connected in the way that Choi suggested in order to have the electrical power operate the fax machine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOBI whose telephone number is (571)270-3434. The examiner can normally be reached on Monday-Friday (8AM-5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. E./
Examiner, Art Unit 2614
/Curtis Kuntz/
Supervisory Patent Examiner, Art Unit 2614